

# **Reissuance of the San Diego County Municipal Storm Water Permit**

Permit Workshop  
April 26, 2006



# Introduction

- Workshop Format
  - We will present and discuss the major changes to the Permit
  - Copermittee Presentation
  - Short Break
  - Response to Copermittee presentation
  - Q & A after presentations
  - Use cards to provide us with your questions and comments
    - Provide your most important questions and comments
    - Responses at workshop are informal – formal responses will be provided as part of written comment and response process

# Introduction

- Regional Board Staff
  - Phil Hammer
    - Introduction, Watersheds, Development Planning
  - Eric Becker, P.E.
    - Development Planning, Hydromodification
  - Ben Neill
    - Construction, Industrial/Commercial

# Introduction

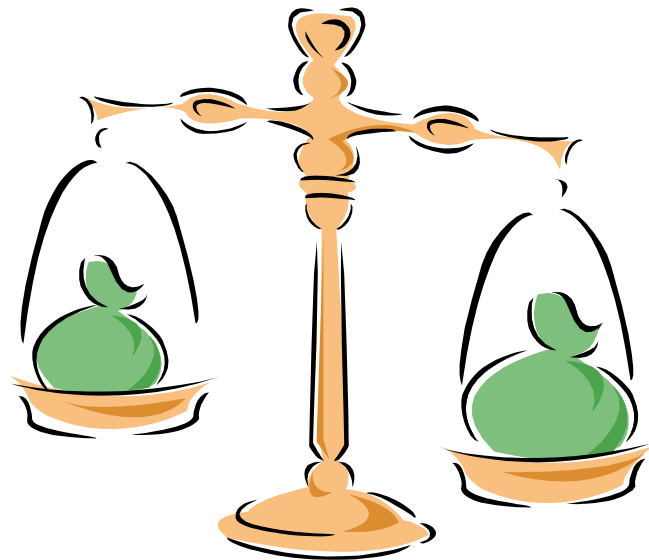
- Workshop Purpose
  - Opportunity for public comments and questions
  - Respond to public comments and questions
  - Provide clarification on Permit requirements and Regional Board expectations
  - Provide rationale for Permit requirements
  - Receive clarification on comments and questions

# Reissuance Process

- Public Hearing planned June 21, 2006
  - Regional Board office
- Public comment period closes at end of hearing
  - Opportunity for oral comments
  - Submit written comments by June 7 in order for Board members to receive them before hearing
  - Written comments also accepted at hearing
  - Responses provided to all written comments prior to consideration of adoption
- Consideration of adoption August 9, 2006

# Permit Overview

- Flexible v. Prescriptive Requirements
  - Permit seeks balance
  - Provides minimum measurable outcomes
  - Provides flexibility in meeting outcomes



# Permit Overview

- Goal is to shift focus from program implementation to water quality results
- Increased emphasis on assessment of effectiveness of programs
- Increased emphasis on watersheds
  - Conditions of receiving waters drive actions
    - Targets pollutants of concern
    - Effective use of resources

# Permit Overview

- Program Integration
  - Activities required on Jurisdictional, Watershed, and Regional levels
  - Jurisdictional, Watershed, Regional activities are not mutually exclusive
    - Watershed requirements are the primary vehicle for program integration
    - Jurisdictional and Regional activities can be used to meet watershed requirements
      - Helps focus Jurisdictional and Regional activities on specific water quality problems
      - Helps with efficient use of resources



# Watershed Requirements

- Watershed Urban Runoff Management Programs (WURMPs) (Section E)
- Overall framework for requirements similar to existing requirements
- Detail added to provide clarification on Regional Board expectations



# Watershed Requirements

- General framework for implementation
  - Assess available data to identify high priority water quality problems
  - Identify sources of high priority water quality problems
  - Develop strategy to address high priority water quality problems
  - Develop list of potential Watershed Water Quality Activities to implement strategy
  - Evaluate potential Watershed Water Quality Activities

# Watershed Requirements

- General framework for implementation (cont.)
  - Each Copermittee implements at least two Watershed Water Quality Activities annually
    - Activities must reduce discharge of pollutants causing high priority water quality problems
    - Jurisdictions choose activities, but must be consistent with watershed strategy
    - Activities can be within jurisdiction or outside jurisdiction
  - Assessment of activity effectiveness

# Watershed Requirements

- What is a Watershed Water Quality Activity?
  - Activity directly and significantly reduces pollutant discharges or abates sources of pollutants
  - Consistent with watershed strategy
  - Newly implemented during permit cycle
  - Exceeds baseline jurisdictional requirements

# Watershed Requirements

- What is not a Watershed Water Quality Activity?
  - Monitoring
  - Education
  - Planning
  - Other activities which do not directly reduce the discharge of pollutants



# Watershed Requirements

- Examples of Watershed Water Quality Activities
  - Treatment control BMPs
  - Source identification studies which result in abatement of sources
  - BMP pilot projects in identified problem areas
  - Increased inspections of targeted facilities
  - TMDL activities which otherwise meet the criteria

# Watershed Requirements

- Interaction between Jurisdictional, Watershed, Regional activities
  - Jurisdictional and regional activities can meet watershed requirements if they exceed the minimum jurisdictional requirements
    - Jurisdictional and regional activities must be implemented at all applicable locations within a jurisdiction, not just one or two locations
  - To the extent that jurisdictional and regional activities meet watershed requirements, extra watershed activities are not required
    - Meets goal of focusing overall efforts on water quality problems and achieving water quality results

# Development Planning (SUSMPs)

- Site Design BMPs (LID) (Section D.1.d.(4))
  - Minimum requirements, measurable outcomes
  - Choose from lists
    - Drain portion of runoff to pervious areas
    - Use permeable surfaces for portion of low traffic areas
    - Conserve natural areas, minimize impervious surface widths and footprint
- Site Design BMP Substitution Program (Section D.1.d.(7))





# Development Planning (SUSMPs)

- Treatment Control BMP Maintenance Tracking (Section D.1.e)
  - Inventory BMPs
  - Prioritize BMPs
  - Inspect BMPs for maintenance
    - High priority annually
    - Medium priority biannually
    - Low priority once during permit term
  - Annual verification of maintenance




# Development Planning

- Structural BMP Effectiveness-Section D.1.d.(6)(d)
- Audits -Least Effective BMPs Approved
- Now Must Select High or Medium
- Feasibility Analyses For Low
  - Detail How BMP Selected
  - Justify Why Better BMPs Not Used
  - Include Technical Support For Conclusions
    - Example: Swale Residency Time Too Low

# **San Diego Municipal Permit Workshop**

Eric Becker, P.E.  
Water Resource  
Control Engineer  
April 26, 2006



# Hydromodification-Section D.1.g



# Hydromodification

- Statewide Issue
  - Other Regional Boards
  - Nonpoint Source Program
  - Southern CA Coastal Water Research Project (SCCWRP)
  - Major Focus at 2005 CASQA Conference
- San Diego Municipal Permit R9-2001-01



# Hydromodification-Existing

- Existing SUSMP Requirements
  - Prevent Increased Downstream Erosion & Protect Stream Habitat
  - Project Self Evaluation/Certification
- Need For Change
  - No Standard To Evaluate Projects By
  - Only Address Flood Control
  - Resulting Few Control Measures



# Hydromodification-Proposed

- Follow Requirements in Regional Boards 2 & 4
- Copermittees Develop Hydromodification Plan (HMP)
  - Intent to Develop Local Criteria to Control Runoff Rates & Durations
  - Require Projects to Implement Control Measures
  - Establish Where Requirements Apply
  - 2-Years

# Hydromodification-HMP Component

- Establish Erosion Potential ( $E_p$ ) Standard For San Diego Region
  - Select Test Watershed(s)
  - Model Pre/Existing Stream Flows
    - Hydraulic Force/Work Done On Channel
  - Pre/Existing Comparison Represents Ratio
- Ratio For Stable Channel
  - $E_p$  Should be Near 1
  - Low Risk of Erosion





# Hydromodification-HMP Component

- Determine Range of Rainfall Event Rates/Durations To Be Controlled
  - Model Rainfall Data
  - Determine Critical Discharge Rate ( $Q_c$ )
  - Range of  $Q_c$  to Upper Limit for Pre-Urban
    - Example: Q2 to Q10 From Region 2
  - Manage Range to Achieve  $E_p$  Standard
- Establish Criteria
  - Regional (if appropriate)
  - Site or Area Specific
    - Watersheds, Channels, Segments Basis

# Hydromodification-HMP Component

- Require SUSMP Projects Meet Standards/Criteria
  - Change Local Approval Process
- Require Hydrologic Controls
- Include Design Criteria
  - Retention/Detention/  
Infiltration Measures
- Monitoring/Program Evaluation
- Address Cumulative Impacts



# Hydromodification-Optional

- Optional HMP Component
- Equivalent Protection to On-Site Controls
- Implement In-Stream Measures
  - Increase Capacity of Channel
  - Restoration of Natural Hydrologic Conditions
  - Buffers
  - Alternate Discharge Points
- Not Include Non-Natural Measures
  - Concrete & Rip Rap

# Hydromodification-Exceptions

- Not Apply to Areas of Minimal Erosion Impact
  - Hardened Channels
  - Discharges to Bays/Ocean
  - Highly Developed Watersheds
  - Redevelopment Sites



# Hydromodification

- Reporting
  - Every 6-months
    - Initial Workplan, Progress Report, Draft HMP
  - Final HMP by July 2008
- Implementation
  - Within 6 months Board Approval of HMP
  - Expectation Sooner If Possible

# Hydromodification-Interim Criteria

- Interim Requirements
  - Address Large Projects Until HMP is Done
  - Apply to Projects >50-Acres
    - Only 12% of Total Projects Over 1-Acre
  - Require Individual Hydromodification Analysis Study
    - Similar to HMP requirements
  - Require By July 2007

# Example HMPs

- Santa Clara Valley Urban Runoff HMP:

<http://www.scvurppp.org>

- Contra Costa County HMP:

<http://cccleanwater.org/construction/nd.php>



# Construction Section D.2

Ben Neill

Water Resource  
Control Engineer

April 26, 2006





# Construction

- Ordinance Update
  - Address Changes in Permit Within 365 days
- Approval Process
  - SWMP Review for Local Requirements
    - Past Reviews Inadequate
- Source Identification
  - Monthly Updates of Site Inventory
    - Dynamic Process
    - Assist Scheduling Inspections

# Construction-BMPs

- Set Minimum BMPs
  - Not Based On Priority
- Pollution Prevention Added
- Removed Seasonal Restrictions
- Phased Grading
  - Maximum Disturbed Area



# Construction-BMPs

- Slope Stabilization
  - Active vs. Inactive
- Advanced Treatment
  - Threat to Water Quality
- Dry Season BMPs
  - Rain events



# Construction-Inspection

- High Priority
  - Biweekly
- Medium Priority
  - Monthly
  - Large Construction Projects More Attention
- Low Priority
  - As Needed
  - Less Than 1 Acre
- Inspections protocol



# Construction-Enforcement

- Escalating Process
  - Prompt and Effective
- Use Stop Work
- Inspector Enforcement Authority



# **Industrial and Commercial Section D.3.b**





# Industrial and Commercial

- Sections Combined
- Source Identification
  - Building Material Retailers
  - Animal Facilities
  - Power Washing Services



# Industrial and Commercial - Inspections

- Procedure Requirements
- Annual Inspections for High Priority Sites
- 40% of Inventoried sites to be Inspected each Year.





# Industrial and Commercial – Mobile Businesses

- Inspections as needed
- BMPs, Enforcement, Notification, Education
- Allows Copermittee Cooperation



# Additional Information

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- For more detail on these permit changes and others, please see our website
- [www.waterboards.ca.gov/sandiego/programs/sd\\_stormwater.html](http://www.waterboards.ca.gov/sandiego/programs/sd_stormwater.html)